

**What is claimed:**

1. A multi-media communication management system for operation with a plurality of subscriber stations, at least one of which serves a subscriber device, the multi-media communication management system comprising:

5 a network communication circuit for multi-media communication with said plurality of subscriber stations;

a service provider interface for multi-media communication with a communication originating device over a service provider communication medium;

a communication gateway coupled to the network communication circuit and the service provider interface comprising:

means for receiving, from the communication originating device, a first audio session initiation signal identifying a subscriber to which the audio session initiating signal is to be directed,

means for identifying which of the plurality of subscriber stations is presently serving a subscriber device that is associated with the identified subscriber, and

means for providing a second audio session initiation signal to the identified subscriber station via the network communication circuit.

20 2. The multi-media communication management system of claim 1, wherein the communication gateway further comprises:

means for receiving an open session signal from the subscriber station in response to the second audio session initiation signal;

25 means for establishing a first communication channel with the originating device;

means for establishing a second communication channel with the subscriber station in response to the open session signal; and

means for relaying audio communication data between the first communication channel and the second communication channel for the duration of the audio

session.

3. The multi-media communication management system of claim 2, wherein the communication gateway further comprises:

5 means for identifying a subscriber device associated with the identified subscriber station;

4. The multi-media communication management system of claim 1, wherein the communication gateway further comprises:

10 means for establishing a first communication channel with the originating device; and

means for recording an audio message received on the first communication channel if an open session signal is not received from the subscriber station during a time period following when the second audio session initiation signal was provided to the subscriber station.

15 5. The multi-media communication management system of claim 1, wherein the communication gateway further comprises:

20 means for establishing a first communication channel with the originating device; and

means for recording an audio message received on the first communication channel if an audio session is already open between the communication gateway and the identified subscriber station.

25 6. A multi-media communication management system for operation with a plurality of subscriber stations, at least one of which serves a subscriber device, the multi-media communication management system comprising:

a network communication circuit for multi-media communication with said plurality of subscriber stations;

a service provider interface for multi-media communication with an originating device over a service provider communication medium;

a communication gateway coupled to the network communication circuit and the service provider interface comprising:

5 means for receiving, from the originating device, a audio session initiation signal identifying a subscriber to which the audio session initiating signal is to be directed;

means for opening a first communication channel with the originating device;

10 means for identifying whether the identified subscriber station is then currently serving a subscriber device that is associated with the identified subscriber;

means for recording an audio message received on the first communication channel if the subscriber device that is associated with the subscriber identifier is not served by the identified subscriber station.

15 7. A multi-media communication management system for operation with a plurality of subscriber stations, at least one of which serves a subscriber device, the multi-media communication management system comprising:

20 a network communication circuit for multi-media communication with said plurality of subscriber stations;

a service provider interface for multi-media communication with an originating device over a service provider communication medium

25 a session control server coupled to the network communication circuit comprising:

means for receiving a message from a subscriber station identifying which of a plurality of subscriber devices is then currently served by the subscriber station;

means for recording that the identified subscriber device is served by

the subscriber station in a location table; and

a communication gateway coupled to the network communication circuit and the service provider interface comprising:

means for receiving, from the originating device, a audio session initiation signal identifying a subscriber to which the audio session initiating signal is to be directed;

means for querying the location table to identify which of a plurality of subscriber stations is currently serving a subscriber device that is associated with the subscriber identifier; and

means for providing a second audio session initiation signal to the identified subscriber station via the network communication circuit.

8. The multi-media communication management system of claim 7, wherein the session control server further comprises:

means for receiving a message from a subscriber station indicating that the identified subscriber device is no longer served by the subscriber station;

means for recording that the identified subscriber device is not served by a subscriber station in the location table;

9. The multi-media communication management system of claim 8, wherein the communication gateway further comprises:

means for receiving an open session signal from the subscriber station in response to the second audio session initiation signal; and

means for establishing a first communication channel with the originating device and establishing a second communication channel with the subscriber station in response to the open session signal; and

means for relaying audio communication data between the first communication channel and the second communication channel for the duration of the audio session.

10. The multi-media communication management system of claim 8, wherein the session control server further comprises:

means for establishing a first communication channel with the originating device; and

means for recording an audio message received on the first communication channel if an audio session is already open between the gateway and the identified subscriber station.

11. The multi-media communication management system of claim 8, wherein the communication gateway further comprises:

means for establishing a first communication channel with the originating device; and

means for recording an audio message received on the first communication channel if the subscriber device is not served by the identified subscriber station.

12. The multi-media communication management system of claim 8, wherein the communication gateway further comprises:

means for establishing a first communication channel with the originating device; and

means for recording an audio message received on the first communication channel if an open session signal is not received from the identified subscriber station during a time period following when the second audio session initiation signal was provided to the identified subscriber station.

13. A method of providing audio communication routing to a subscriber in a multi-media communication management system comprising a plurality of subscriber stations, at least one of which serves a subscriber device, the method comprising the steps of:

receiving a first audio session initiation signal, that identifies a subscriber to whom the audio session initiating signal is to be directed, from an originating device over a service provider communication medium;

identifying which of the plurality of subscriber stations is currently serving a subscriber device that is associated with the subscriber;

providing a second audio session initiation signal to the identified subscriber station via a local network communication circuit.

14. The method of claim 13, further comprising:

receiving an open session signal from the identified subscriber station in response to the second audio session initiation signal;

establishing a first communication channel with the originating device;

establishing a second communication channel with the identified subscriber station in response to the open session signal; and

relaying audio communication data between the first communication channel and the second communication channel for the duration of the audio session.

15. The method of claim 13, wherein the step of identifying comprises: identifying a subscriber device associated with the subscriber.

16. The method of claim 13, further comprising:

establishing a first communication channel with the originating device; and

recording an audio message received on the first communication channel if an open session signal is not received from the identified subscriber station during a time period following when the second audio session initiation signal was provided to the identified subscriber station.

17. The method of claim 13, further comprising:

establishing a first communication channel with the originating device; and

recording an audio message received on the first communication channel if an audio session is already open between the gateway and the identified subscriber station.

18. A method of providing audio communication routing to a subscriber in a multi-media communication management system comprising a plurality of subscriber stations, at least one of which serves a subscriber device, the method comprising:

receiving a first audio session initiation signal that identifies a subscriber, to whom the audio session initiating signal is to be directed, from an originating device over a service provider communication medium;

opening a first communication channel with the originating device;

identifying whether the identified subscriber station is presently serving a subscriber device that is associated with the identified subscriber station; and

recording an audio message received on the first communication channel if the subscriber device that is associated with the identified subscriber is not served by a subscriber station.

19. A method of providing audio communication routing to a subscriber in a multi-media communication management system comprising a plurality of subscriber stations, at least one of which serves a subscriber device, the method comprising:

receiving a message from a subscriber station identifying which of a plurality of subscriber devices is then currently served by the subscriber station;

recording that the identified subscriber device is served by the subscriber station in a location table;

receiving a first audio session initiation signal that identifies a subscriber, to whom the audio session initiating signal is to be directed, from an originating device over a service provider communication medium;

querying the location table to identify which of the plurality of subscriber stations is currently serving a subscriber device that is associated with the identified

subscriber; and

means for providing a second audio session initiation signal to the identified subscriber station via a local network communication circuit.

- 5 20. The method of claim 19, further comprising:
- receiving a message from a subscriber station indicating that the identified subscriber device is no longer served by the subscriber station; and
  - recording that the identified subscriber device is not served by a subscriber station in the location table;

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21. The method of claim 20, further comprising:
- receiving an open session signal form the subscriber station in response to the second audio session initiation signal; and
  - establishing a first communication channel with the originating device;
  - 15 establishing a second communication channel with the subscriber station in response to the open session signal; and
  - relaying audio communication data between the first communication channel and the second communication channel for the duration of the audio session.

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- 20 22. The method of claim 20, further comprising:
- establishing a first communication channel with the originating device; and
  - recording an audio message received on the first communication channel if an audio session is already open between the gateway and the subscriber station.

- 25 23. The method of claim 20, further comprising:
- establishing a first communication channel with the originating device; and
  - recording an audio message received on the first communication channel if the subscriber device is not served by the subscriber station.



24. The method of claim 20, further comprising  
 establishing a first communication channel with the originating device; and  
 recording an audio message received on the first communication channel if an  
 open session signal is not received from the subscriber station during a time period  
 5 following when the second audio session initiation signal was provided to the  
 subscriber station.